

MONODISPERSE HETEROTELCHELIC DIOL/AMINE-BASED  
POLYURETHANE/UREA HYBRIDS FOR USE IN GOLF BALLS

ABSTRACT

5 A golf ball including a core and a cover layer, where the cover layer includes a curing agent and a polyurethane/urea hybrid prepolymer formed from a polyisocyanate and a monodisperse heterottelechelic polymer having a polydispersity of from about 1.0 to about 1.3, and having the formula:



where **C** is a hydrogenated or unsaturated block derived by anionic polymerization of at least one monomer selected from the group consisting of conjugated dienes, alkenyl-substituted aromatic hydrocarbons, and mixtures thereof; **Y** and **Z** are independently branched or straight chain 15 hydrocarbon connecting groups which contains 3-25 carbon atoms optionally substituted with aryl or substituted aryl containing lower alkyl, lower alkylthio, or lower dialkylamino groups; **Q** is an unsaturated or hydrogenated hydrocarbyl group derived by incorporation of at least one compound selected from the group consisting of conjugated diene hydrocarbons, alkenyl- 20 substituted aromatic hydrocarbons, and mixtures thereof; **T** and **W** are different and are selected from either oxygen or nitrogen; and **n** is an integer from 0 to 5.